

Serial No. 09/620,715
Page 2 of 10

IN THE CLAIMS

1. (currently amended) A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

a network where a plurality of logical channels are established in a time division multiplex method;

a distribution device distributing picture data via a logical channel designated by a distribution instruction;

a plurality of receiving devices receiving picture data from respective logical channels designated by receiving instructions; and

an allocation unit for allocating respective bandwidth to each of a plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted, wherein

said allocation unit allocates a predetermined first bandwidth to each of the logical channels when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted does not exceed a predetermined threshold ~~bandwidth number~~, and when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted exceeds the threshold ~~bandwidth number~~ said allocation unit allocates the first bandwidth to each of a part of the logical channels and a predetermined second bandwidth, which is ~~smaller than the first bandwidth~~ obtained by dividing the first bandwidth by a predetermined integer, to each of another part of the logical channels.

2. (original) The picture distribution system according to claim 1, wherein said network is a ring-shaped transmission line.

84162329_1

3. (original) The picture distribution system according to claim 1, further comprising a determination unit determining a number of logical channels to be established in said network.

4. (original) The picture distribution system according to claim 1, further comprising an allocation unit allocating respective bands used to transmit picture data to the plurality of logical channels.

5. (canceled)

6. (previously presented) The picture distribution system according to claim 1, wherein priority is given in advance to the plurality of logical channels, and said allocation unit allocates respective bands to the plurality of logical channels based on the priority given to each logical channel.

7. (previously presented) The picture distribution system according to claim 1, wherein priority is given in advance to the plurality of receiving devices; and said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device.

8. (previously presented) The picture distribution system according to claim 1, wherein

said distribution device generates a receiving instruction according to a received distribution instruction and transmits the receiving instruction to a corresponding receiving device via said network.

9. (currently amended) A distribution device which is used in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising:

a distribution unit distributing picture data to a plurality of receiving devices with a function to receive picture data from a logical channel designated by a receiving instruction via a logical channel designated by a distribution instruction; and

an allocation unit for allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted, wherein

said allocation unit allocates a predetermined first bandwidth to each of the logical channels when ~~a total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted does not exceed a predetermined threshold bandwidth number, and when ~~a total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted exceeds the threshold bandwidth number said allocation unit allocates the first bandwidth to each of a part of the logical channels and a predetermined second bandwidth, which is ~~smaller than the first bandwidth~~ obtained by dividing the first bandwidth by a predetermined integer, to each of another part of the logical channels.

Serial No. 09/620,715

Page 5 of 10

10. (currently amended) A receiving device which is used as one of a plurality of receiving devices in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method and respective bandwidth is allocated to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted, comprising:

a receiving unit receiving a set of picture data from a logical channel designated by a receiving instruction, the set of picture data being transmitted from a distribution device with a function to distribute picture data via a logical channel designated by a distribution instruction, wherein

respective bandwidth is allocated as a predetermined first bandwidth to each of the logical channels when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted does not exceed a predetermined threshold bandwidth number, and when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted exceeds the ~~threshold bandwidth number~~ the respective bandwidth is allocated as the first bandwidth to each of a part of the logical channels and a predetermined second bandwidth, which is ~~smaller than the first bandwidth~~ obtained by dividing the first bandwidth by a predetermined integer, to each of another part of the logical channels.

11. (currently amended) A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

a network where a fixed-length frame composed of a plurality of time slots are transmitted;

84162329_1

Serial No. 09/620,715

Page 6 of 10

one or more distribution devices storing first picture data in a first time slot of the fixed-length frame, storing second picture data in a second time slot of the fixed-length frame, and transmitting the fixed-length frame to the network;

a plurality of receiving devices receiving the respective picture data from the first or second time slots of the fixed-length frame according to a receiving instruction; and

an allocation unit for allocating respective bandwidth to a plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted, wherein

said allocation unit allocates a predetermined first bandwidth to each of the logical channels when ~~a total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted does not exceed a predetermined threshold bandwidth number, and when ~~a total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted exceeds the threshold bandwidth number said allocation unit allocates the first bandwidth to each of a part of the logical channels and a predetermined second bandwidth, which is ~~smaller than the first bandwidth~~ obtained by dividing the first bandwidth by a predetermined integer, to each of another part of the logical channels.

12. (original) The picture distribution system according to claim 11, wherein if third picture data are requested to be distributed while the first and second picture data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network.

Serial No. 09/620,715

Page 7 of 10

13. (currently amended) A picture distribution method for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

establishing a plurality of logical channels by a time division multiplex method;

allocating respective bandwidth to the plurality of logical channels used to transmit picture data according to a number of picture data to be transmitted;

distributing picture data via a logical channel designated by a distribution instruction; and

a plurality of receiving devices receiving respective picture data from logical channels designated by corresponding receiving instructions, wherein

said allocating step allocates a predetermined first bandwidth to each of the logical channels when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted does not exceed a predetermined threshold ~~bandwidth number~~, and when a ~~total bandwidth allocated to the logical channels~~ the number of picture data to be transmitted exceeds the threshold ~~bandwidth number~~ said allocating step allocates the first bandwidth to each of a part of the logical channels and a predetermined second bandwidth, which is ~~smaller than the first bandwidth~~ obtained by dividing the first bandwidth by a predetermined integer, to each of another part of the logical channels.

14. (previously presented) The picture distribution method according to claim 13, further comprising:

determining a number of logical channels to be established according to the number of picture data to be transmitted; and

generating the distribution instruction based on the determined number of logical channels and allocated bandwidth.

8/162329_1